UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,433	12/07/2005	Limin Li	FUNC-0009-US1	6119

22506 7590 03/27/2008

JAGTIANI + GUTTAG
10363-A DEMOCRACY LANE
FAIRFAX, VA 22030

EXAMINER	
MONSHIPOURI, MARYAM	

ART UNIT	PAPER NUMBER
1656	

MAIL DATE	DELIVERY MODE
03/27/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/524,433	LI ET AL.	
	Examiner	Art Unit	
	Maryam Monshipouri	1656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *1* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-156* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-156* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-23, 27-40, drawn to DNA encoding mammalian RapR6 protein, vectors and host cells comprising said DNA, a method of expressing said DNA, its expression product and pharmaceutical compositions comprising said products.

Group II, claim(s) 24-26, 109-114, drawn to an antibody that is capable of binding to RapR6 protein and a method of use thereof.

Group III, claim(s) 41-63, 118-129, drawn to a method of generating a genetically modified cell having altered sensitivity to rapamycin, utilizing knockout DNA construct and cell comprising a knockout DNA construct at a RapR6 locus.

Group IV, claims 64-67, 69, 115-117, 134-135 drawn to a modulator of RapR6 gene, and a method of treating a mammal having cancer comprising administering a modulator of RapR6 gene.

Group V, claims 64-67, 69, 134, 136, drawn to a modulator of RapR6 polypeptide and kits comprising it.

Group VI, claim 68 drawn to a method of treating a cancerous mammal utilizing RapR6 gene modulator and rapamycin.

Group VII, claim 68, drawn to a method of treating a cancerous mammal utilizing RapR6 polypeptide modulator and rapamycin.

Group VIII, claims 71-78, 80, 137-140 drawn to a method of diagnosing cancer utilizing RapR6 gene.

Group IX, claims 79-84, drawn to a method of diagnosing cancer utilizing RapR6 polypeptide.

Group X, claims 85-93, 154-156, drawn to a method of evaluating rapamycin resistance in a cell utilizing RapR6 gene.

Group XI, claims 94-99, 141-144, a method of evaluating rapamycin resistance utilizing RapR6 polypeptide.

Group XII, claims 100-101, drawn to a method of regulating rapamycin resistance in a cell utilizing RapR6 gene modulator.

Group XIII, claims 101, 147-149, drawn to a method of regulating a rapamycin resistance in mammal utilizing RapR6 polypeptide modulator.

Group XIV, claims 101, 145-146, 150-153**,** drawn to a method of regulating a rapamycin resistance in mammal utilizing RapR6 gene modulator.

Group XV, claims 102-103, drawn to a method of regulating cell growth utilizing RapR6 polypeptide modulator.

Group XVI, claims 102, 104, drawn to a method of regulating cell growth utilizing RapR6 polypeptide modulator.

Group XVII, claims 105-108, drawn to a method of identifying modulators of RapR6 gene.

Group XVIII, claims 105-108, drawn to a method of identifying modulators of RapR6 polypeptide.

Group XIX, claims 130-133, drawn to a microarray comprising RapR6 gene.
In addition to inventions listed above each of the inventions of Groups I-II are independently and additionally directed to the following two patentably distinct invention which have no common technical feature:

(a): SEQ ID NO:3 or DNA encoding it.
(b) SEQ ID NO:11 or DNA encoding it.

When electing any of the inventions of Groups I-II applicant is advised to simultaneously elect an invention from groups a-b. **This is not a species election.**

The inventions listed as Groups I-XIX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical features of Groups I, II, III, IV, V, VI, VII and XIX are: RapR6 gene (DNA) or method of use thereof, RapR6 antibody or method of use thereof , modified cell or method of preparation thereof, RapR6 gene modulator (or method of use thereof) , RapR6 polypeptide modulator (or method of use thereof) , gene modulator plus rapamycin (or method of use thereof), polypeptide modulator plus rapamycin (and method of use

thereof) and microarrays , which are each directed to products of unrelated chemical structure and function, which have no common special technical feature.

Groups I, VIII and X share a special technical feature, namely DNA but said inventions are not required to be rejoined under PCT rule 13.1 because Group I already has a method of use of DNA.

Similarly, Groups IX, XI share a special technical features namely RapR6 polypeptide but again but said inventions are not required to be rejoined under PCT rule 13.1 because Group IX already has a method of use of DNA.

Likewise the inventions of Groups IV, XII, XIV, XVII share a special technical features namely RapR6 gene modulator, but again but said inventions are not required to be rejoined under PCT rule 13.1 because Group IV already has a method of use of DNA modulator.

In the same manner, the inventions of Groups V, XIII, XV, XVIII share a special technical feature namely RapR6 polypeptide modulator, but again but said inventions are not required to be rejoined under PCT rule 13.1 because Group V already has a method of use of polypeitde modulator.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder**. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.Any inquiry concerning this communication or earlier communications from the examiner should be

directed to Maryam Monshipouri whose telephone number is (571) 272-0932. The examiner can normally be reached on Tues.-Fri., from 7:00 a.m to 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleene Kerr Bragdon can be reached on (571) 272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Maryam Monshipouri/

Primary Examiner, Art Unit 1656

***